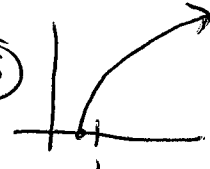


Answers

Ch 6
p 338 -

- (29) $\{\frac{1}{3}, -\frac{3}{2}\}$ (31) $10, -7$ (37) $\{3 \pm 2\sqrt{5}\}$ (39) a. -24
b. 2 complex or imaginary
c. $-1 \pm i\sqrt{6}$
- (41) a. 73
b. Irrational
c. $\frac{-7 \pm \sqrt{23}}{6}$
- (49) $y = \frac{1}{2}(x+2)^2 + 3$ (57) $x < -\frac{1}{2}$ or $x > 3$

Ch 7
p 400 -

- (7) $p(-4) = -6$
 $p(x+h) = x+h-2$ (21) $\{4, -2 \pm 2i\sqrt{3}\}$ (23) $\{\pm 2\}$ (39) $1, 2, 4, -3$
- (43) $[g \circ h](x) = x^2 - 1$
 $[h \circ g](x) = x^2 - 6x + 11$ (45) $[g \circ h](x) = -15x - 5$
 $[h \circ g](x) = -15x + 25$ (49) $f^{-1}(x) = \frac{-x-3}{2}$ (51) $f^{-1}(x) = \frac{2x-1}{-3}$ (55) 
D: $x \geq \frac{3}{5}$
R: $y \geq 0$

Ch 8 p 462 -

- (11) $(\frac{5}{2}, 4)$ (15) $\sqrt{290}$ (19) $V(4, -2)$
 $F(4, -4)$
a.o.s. $x=4$
D: $y=0$
opens down
LR = 8 units
- (21) $y = \frac{1}{8}x^2 + 1$ (23) $(x+4)^2 + y^2 = \frac{9}{16}$
- (27) $C(-5, 11)$
 $r=7$ (31) $C(9, 0)$
 $F(0 \pm 3)$
major = 10
minor = 8
- (33) $C(-2, 3)$
 $F(-2 \pm \sqrt{5}, 3)$
major 6
minor 6
- (35) $V(0 \pm 2)$
 $F(0 \pm \sqrt{3})$
asym. $y = \pm \frac{2}{3}x$
- (37) $V(0, \pm 4)$
 $F(0 \pm 5)$
asym. $y = \pm \frac{4}{3}x$

Check graphs w/ DESMOS

Ch 10 p 567 -

(11) growth (13) $y = 7(\frac{1}{5})^x$ (15) -1 (19) $\log_5 \frac{1}{25} = -2$ (21) $4^3 = 64$

(27) 2 (31) $\frac{1}{3} < y < 3$ (33) -4, 3 (37) 3 (39) 6

(43) 5.7279 (45) $x < 7.3059$ (49) $\frac{\log 11}{\log 4}$
1.7297 (57) $x > 1.1632$ (61) 11.6487 (62) \$105.47
(64) $\approx .000385$

Ch 11 p 623

(11) -11 (13) -31, 5 (17) 2322 (19) -220 (23) 3

(25) 6, 12 (29) 1452 (33) 72